

FOREST INSECT CONDITIONS  
ON THE CHALLIS N.F. - 1971

The following report is a record of forest insect activity on the Challis National Forest in 1971. Information was compiled from aerial detection surveys, on-the-ground biological evaluations and detection reports submitted by the Forest staff.

Generally, forest insect activity remained at low levels this past year. A localized epidemic of Douglas fir beetle persisted on the south and east facing slopes above Sunbeam Dam. Spruce budworm activity, if any, along the Middle Fork of the Salmon River was not detected during aerial surveys for the second consecutive year.

Increased tree killing of lodgepole pine by mountain pine beetle in Loon Creek above the guard station was recorded; however, due to the restriction of host type, no geographic expansion of the infestation is anticipated. A fall and burn suppression project was conducted in infested lodgepole pine type around Wildhorse Campground, Mackay Ranger District.

DOUGLAS FIR BEETLE - Dendroctonus pseudotsugae Hopk.

With the exception of the epidemic located northwest of the confluence of Yankee Fork and the Salmon River, standing tree losses to this insect may be characterized as scattered in 3 to 10 tree groups. A slight reduction in the number of faders per groups in the infestation above Sunbeam Dam was observed. Control of these attack centers was ruled out due to extremely steep terrain, soil instability for road construction purposes, and impacts that would create problems in a heavily used travel influence zone.

Overall, numbers of attack centers and trees per group have definitely decreased since 1969. This downward trend has been the result of natural rather than applied control factors.

MOUNTAIN PINE BEETLE - Dendroctonus ponderosae Hopk.

Lodgepole pine stands in upper Loon Creek have sustained a chronic infestation of this insect for the fifth year. Until a cruise of the infested area is conducted to measure the present residual green stand, no prediction can be made as to the infestation's duration. In lodgepole pine, the maintenance of this insect's populations is largely dependent on large diameter trees. Until this habitat is depleted, continued insect activity can be expected.

On the Mackay Ranger District, a fall and burn suppression project was conducted in an adjacent to the Wildhorse Campground. Availability of preferred larger d.b.h. trees, limited lodgepole type in the immediate area, and size of current infestation were considerations that favored control action. Four hundred twenty five trees on 57 acres were spotted, felled, bucked and burned. Regional and Zone Office entomologists, plus one man from the Challis National Forest, completed the project in approximately 7 $\frac{1}{2}$ -man days.

In late October a 100 percent cruise of the area was made to determine amounts of new attacks and to locate any missed trees. A total of four new attacks were found. We suggest this small number of trees be felled, bucked and burned by District personnel this coming spring.

With such successful control it appears the District should be able to keep further losses at a minimum by implementing a strong spotting maintenance program. Inevitably, however, the stand will be reduced to a state of equilibrium by losses of larger diameter beetle susceptible trees unless cultural methods to convert the stand to a younger more thrifty condition are employed.

Personnel from the Zone Office will be available upon request to help with any further technical assistance.

At the request of Ranger Garth Baxter, an intensive survey was made of Phi Kappa Campground where mountain pine beetle activity was suspected to be building up. Following is a resume' of finding.

The initial report indicated that possibly 100-150 trees were attacked; however, on close examination it was obvious that campground users had nicked, scarred, chopped and in general hacked trees up to the point where damage looked like pitch tubes resulting from bark beetle attacks.

On October 22 a 100 percent cruise of Phi Kappa was made. Ten new attacks in larger d.b.h. lodgepole pines were located and marked for removal. District personnel should fell, buck and burn these trees prior to July 1, 1972, at which time adults would start emerging.

There is a considerable amount of 10, 12, and 14 inch d.b.h. trees in this area which are not only susceptible to attack, but would perpetuate an epidemic if it ever got started. The best program would be to fell and burn the currently infested trees then keep a close watch for new attacked trees and destroy them as they occur.